Award Number: W81XWH-12-1-0212

TITLE: Wnt/beta-Catenin, Foxa2, and CXCR4 Axis Controls Prostate Cancer Progression

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REPORT DATE: July 2015

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
July 2015	Annual	1Jul2014 - 30Jun2015

4. TITLE AND SUBTITLE

Wnt/beta-Catenin, Foxa2, and CXCR4 axis controls prostate cancer progression

5a. CONTRACT NUMBER
W81XWH-12-1-0212

5b. GRANT NUMBER
PC111074

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

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5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Vanderbilt University Medical Center
Grand Rapids, MI 49503

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Wnt/beta-Catenin signaling and associated target genes are implicated in the establishment of bone metastasis and in the development of castration resistant prostate cancer. Our previous studies have shown that Foxa2 is a Wnt/beta-catenin target gene in prostates. Our preliminary study suggests a Wnt−Foxa2−CXCR4 axis that is involved in PCa bone metastasis, and activation of this axis provides survival mechanisms for PCa cells following androgen deprivation. The hypothesis is that the Wnt/beta-catenin activation of Foxa2 and CXCR4 promotes progression to CRPCa and facilitates bone colonization by PCa cells, and that targeting this axis will provide a novel treatment for PCa bone metastasis and relapse after androgen ablation.

Last October 1st, I moved from Vanderbilt to LSU Health Sciences Center, Shreveport, LA. This award is undergoing an institutional transfer. Since funds have been tied up during the transition, I have not been able to conduct any research related to this project since I moved to LSUHSC.

15. SUBJECT TERMS
Wnt beta-Catenin, Foxa2, CXCR4, prostate cancer, metastasis, castrate resistant

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC
U	U	U	UU	4	19b. TELEPHONE NUMBER *(include area code)*

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Introduction
Due to the transitional state of the award most of last year, we conducted few experiments.

Body
We have optimized methods for invasion assays and stroma/epithelia co-culture. These methods will be used in the future research related to this project.

key research accomplishments
We have optimized methods for invasion assays and stroma/epithelia co-culture.

Reportable outcomes
none

Conclusions
We are ready to continue the research related to this project.

References
None

Appendice
None